

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-18 (canceled).

19. (previously presented) An electronic purse loan off-line device according to claim 20, wherein said processor checks whether or not said IC card is registered.

20. (currently amended) An electronic purse loan off-line device using an IC card having a balance information storage which stores electronic money information representing a balance and a loan information storage which stores information representing a loan for use in a system including said electronic purse loan off-line device, an integrated circuit (IC) card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said electronic purse loan off-line device comprising:

an IC card reader/writer which reads information stored in said IC card and write information to said IC card,

wherein said information is stored on said IC card in rewritable memory including a balance information storage which stores electronic money information representing a balance of said loan and a loan information storage which stores information representing a loan and information regarding said loan including an upper limit of said loan, transactions using said loan, dates

of said transactions, and repayment terms of said loan; and

a processor which, when a commercial transaction is made with a commercial product or server provider, subtracts an amount of money to be paid for said commercial transaction from said balance information storage;

wherein said IC card reader/writer writes information representing a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan into said loan information storage of said IC card when said electronic money information representing a balance is less than said amount of money to be paid for the commercial transaction,

wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for the commercial transaction is greater than a predetermined amount of money of said information representing a loan, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

21. (currently amended) An electronic purse loan off-line device for use in a system including said electronic purse loan off-line device, an integrated circuit (IC) card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card using an IC card having a balance information storage which stores electronic money information representing a balance and a loan information storage which stores information representing a loan, said electronic purse loan off-line device comprising:

an IC card reader/writer which reads information stored in said IC card and writes information to said IC card,

wherein said information is stored on said IC card in rewritable memory including a balance information storage which stores electronic money information representing a balance of said loan and a loan information storage which stores information representing a loan and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions, and repayment terms of said loan; and

a processor which, when a commercial transaction is made with a commercial product or service provider, subtracts an amount of money to be paid for said commercial transaction from said balance information storage;

wherein said IC card reader/writer writes information representing a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan into said loan information storage when said electronic money information representing a balance is less than said amount of money to be paid for the commercial transaction,

wherein said processor checks said information representing a loan stored in said loan information storage of said IC card and inhibits a loan if the term of the loan is greater than a predetermined term, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

22. (previously presented) An electronic purse loan off-line device according to claim 20, wherein said IC card reader/writer reads from/writes to the information stored in said IC card without contacting said IC card.

Claim 23 (canceled).

24. (previously presented) An electronic purse loan off-line device according to claim 20, further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction.

Claim 25 (canceled).

26. (previously presented) An IC card according to claim 30, further comprising:

a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan off-line system without contact.

27. (previously presented) An IC card according to claim 30, further comprising:

a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan off-line system.

28. (previously presented) An IC card according to claim 30, further comprising:

an ID number memory which stores a 10 number registered for a person.

29. (previously presented) An IC card according to claim 30, wherein said transaction is a train fare or a bus fare.

30. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a balance memory which stores electronic data representing a money balance;

a loan memory which stores electronic data of a loan; and

a processor which writes electronic data of a loan of an amount of money to the user of the IC card into said loan memory when said electronic data representing a money balance is less than the amount of money required for a commercial transaction to be made with a commercial product or service provider,

wherein said electronic data of a loan of an amount of money from a bank or center to a user of the IC card includes electronic money information representing the upper limit of a loan and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan, and

wherein said electronic data of said loan is used up to the upper limit of the loan when the commercial transaction exceeds said money balance, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

31. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a balance memory which stores electronic data representing a money balance;

a loan memory which stores electronic data of a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan; and

a processor which writes electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a commercial transaction to be made with a commercial product or service provider,

wherein said electronic data of a loan includes information representing the term limit of a loan,

wherein said electronic data of the loan is used in accordance with the term limit of the loan when the commercial transaction exceeds the money balance, and

wherein payment of the commercial transaction is performed off-line

without being connected to said bank or center.

32. (currently amended) An electronic purse loan off-line system including an electronic purse loan off-line device, an integrated circuit (IC) card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card using an IC card having a balance information storage which stores electronic information representing a money balance, and a loan information storage which stores information representing a loan, said electronic purse loan off-line system comprising:

(a) a terminal having:

an IC card reader/writer which reads information stored in said IC card and writes information to said IC card,

wherein said information stored on said IC card in rewritable memory including a balance information storage which stores electronic money information representing a balance of said loan and a loan information storage which stores information representing a loan and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions, and repayment terms of said loan, and

a processor which, when a commercial transaction is made with a commercial product or service provider, subtracts an amount of money to be paid for said commercial transaction from said balance information storage; and

(b) a center having:

a storage which stores money information and loan information transmitted from said terminal,

wherein said terminal writes electronic information of a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan into said loan information storage and transmits loan information corresponding to said loan to said center when said electronic information representing a money balance is less than the amount of money to be paid for said commercial transaction, and said storage of said center stores said loan information, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

33. (previously presented) An electronic purse loan off-line system according to claim 32, further comprising a center processor in said center, wherein said center processor liquidates a loan when the next transaction of said IC card having a loan information occurs.

34. (previously presented) An electronic purse loan off-line system according to claim 32, further comprising a center processor in said center, wherein said center processor checks data information relating to a loan and approves the loan when said date information is within a predetermined term.

35. (previously presented) An electronic purse loan off-line system according to claim 32, further comprising a center processor in said

center, wherein said center processor checks said information representing a loan and approves a loan when said information is within a predetermined upper limit.

36. (currently amended)A method of carrying out a transaction using an Integrated Circuit (IC) card including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said method comprising:

storing electronic data representing a money balance in a balance memory;

storing electronic data of a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan in a loan memory including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan; and

writing electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a commercial transaction made with a commercial product or service provided,

wherein said electronic data of said loan is used up to the upper limit of the loan when the commercial transaction exceeds said money balance, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

37. (previously presented) A method according to claim 36, wherein electronic data representing money is input from and/or output to an external terminal through a data input/output circuit in said IC card.

38. (previously presented) A method according to claim 36, wherein said external terminal inputs said electronic data of a loan into said loan memory of said IC card without first contacting any other device.

39. (previously presented) An electronic purse loan off-line device according to claim 21, wherein said processor checks whether or not said IC card is registered.

40. (previously presented) An electronic purse loan off-line device according to claim 21, wherein said IC card reader/writer reads from/writes to the information stored in said IC card without contacting said IC card.

41. (currently amended) An electronic purse loan off-line device according to claim 21, further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction.

42. (previously presented) An IC card according to claim 31, further comprising:
a data input/output circuit which inputs/outputs electronic data

representing money from/to an external terminal in an electric purse loan system without contact.

43. (previously presented) An IC card according to claim 31, further comprising:

a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan off-line system.

44. (previously presented) An IC card according to claim 31, further comprising:

an ID number memory which stores a 10 number registered for a person.

45. (previously presented) An IC card according to claim 31, wherein said commercial transaction is a train fare or a bus fare.

46. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a rewritable memory which stores electronic data representing a money balance and electronic data of a loan including an amount of money loaned from a bank or center to the user of the IC card and information

regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan; and

a processor which writes said electronic data of the loan into said memory when said electronic data representing the money balance is less than an amount of money required for a commercial transaction with commercial product or service provider, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

47. (previously presented) An IC card according to claim 46, further comprising:

a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan off-line system without contact.

48. (previously presented) An IC card according to claim 46, further comprising:

a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan off-line system.

49. (previously presented) An IC card according to claim 46, further comprising:

an ID number memory which stores a ID number registered for a person.

50. (previously presented) An IC card according to claim 46, wherein said commercial transaction is a train fare or a bus fare.

51. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a rewritable memory which stores money information, including money information representing a loan including an amount of money loaned from a bank or center to the user of the IC card and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan; and

a processor which writes said money information representing the loan into said memory when money information representing a balance is less than the amount of money to be paid for a commercial transaction with commercial product or service provider, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

52. (previously presented) An IC card according to claim 51, further comprising:

a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan off-

line system without contact.

53. (previously presented) An IC card according to claim 51, further comprising:

a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan off-line system.

54. (previously presented) An IC card according to claim 51, further comprising:

an ID number memory which stores a ID number registered for a person.

55. (previously presented) An IC card according to claim 51, wherein said commercial transaction is a train fare or a bus fare.

56. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including an electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a loan information storage which stores information representing a loan including an amount of money loaned from a bank or center to the user of the IC card and information regarding said loan including an upper limit of said loan, transactions and repayment terms of said loan; and

a processor which writes said information representing the loan into said loan information storage when an electronic money information representing a balance is less than the amount of money to be paid for a commercial transaction with commercial product or service provider, and

wherein payment of the commercial transaction is performed off-line without being connected to said bank or center.

57. (previously presented) An IC card according to claim 56, further comprising:

a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan off-line system without contact.

58. (previously presented) An IC card according to claim 56, further comprising:

a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan off-line system.

59. (previously presented) An IC card according to claim 56, further comprising:

an ID number memory which stores a ID number registered for a person.

60. (previously presented) An IC card according to claim 56, wherein said commercial transaction is a train fare or a bus fare.

61. (currently amended) An Integrated Circuit (IC) card used in an electronic purse loan off-line system including said electronic purse loan off-line device, said IC card, a bank or center which provides a loan of an amount of money to the user of the IC card and a commercial product or service provider that manages a commercial transaction with the user of the IC card, said IC card comprising:

a loan information storage which stores information representing a loan of an amount of money from a bank or center to the user of the IC card and information regarding said loan including an upper limit of said loan, transactions using said loan, dates of said transactions and repayment terms of said loan; and

a processor which writes said information representing a loan into said loan information storage when an electronic money information representing a balance is less than the amount of money to be paid for a commercial transaction with commercial product or service provider, whereby payment of the commercial transaction is performed without being connected to said bank or a-center.